

AD-A121 194

SEAPLANE USE OF PROJECT WATERS LAKE ASHTABULA BALDHILL  
DAM SHEYENNE RIVER BARNES COUNTY NORTH DAKOTA(U) CORPS  
OF ENGINEERS ST PAUL MN ST PAUL DISTRICT JUL 79

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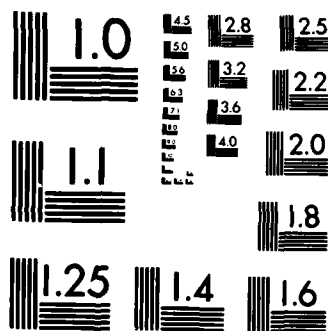
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DEPARTMENT OF THE ARMY  
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ST PAUL, MINNESOTA 55101

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REPLY TO  
ATTENTION OF:  
NCS-ED-ER

NEGATIVE DECLARATION

In accordance with the National Environmental Policy Act of 1969, the St. Paul District, Corps of Engineers has assessed the environmental impacts of the following project:

SEAPLANE USE OF PROJECT WATERS  
LAKE ASHTABULA  
BALDHILL DAM, SHEYENNE RIVER  
BARNES COUNTY, NORTH DAKOTA

The environmental review process indicates that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

The attached environmental assessment summarizes our environmental review. Those who have information which may alter the assessment and lead to a reversal of this decision should notify the District Engineer within 30 days of the date below.

27 July 79  
DATE

*William W. Badger*  
WILLIAM W. BADGER  
Colonel, Corps of Engineers  
District Engineer

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Sheyenne River Recreation Seaplanes Lake Ashtabula Baldhill Dam			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Lake Ashtabula was created by the construction of Baldhill Dam and is located on the Sheyenne River, North Dakota. The Corps proposes to allow seaplanes to use the Lake Ashtabula reservoir. This is consistent with the operational, recreational, and environmental objectives established for the reservoir. Seaplane landings would disturb waterfowl, and the noise might disturb other wildlife. The major impact would be scattering of waterfowl during the spring and fall migratory seasons.			

ENVIRONMENTAL ASSESSMENT  
SEAPLANE USE OF PROJECT WATERS  
LAKE ASHTABULA  
BALDHILL DAM, SHEYENNE RIVER  
BARNES COUNTY, NORTH DAKOTA

INTRODUCTION

Section 327.4 of Title 36 of the Code of Federal Regulations prohibits the operation of aircraft on lands or waters under the jurisdiction of the Army Corps of Engineers, unless a landing area is specifically designated by the District Engineer. This assessment provides information regarding a proposed action by the District Engineer to allow seaplane use of the Lake Ashtabula Reservoir. The purpose of this document is to assess the environmental impacts associated with the proposed designation of a landing area for seaplanes on Lake Ashtabula.

1.00 PROJECT DESCRIPTION

EXISTING PROJECT

Summary of Existing Project

1.01 Public Law 78-534, The Flood Control Act of 1944, authorized the Corps of Engineers to construct and operate a multiple-purpose reservoir for flood control and water conservation on the Sheyenne River immediately upstream from Valley City, North Dakota. The major feature of the project is an earthfill dam (Baldhill Dam) which created Lake Ashtabula. This lake is operated primarily for control of the heavy spring runoff from snowmelt in order to achieve flood damage reduction in the areas downstream of the dam. During the late summer and early fall low-flow periods of the Sheyenne River, the stored water can be released for water supply, irrigation, and low-flow augmentation to areas downstream of the dam.

1.02 The provision of recreational facilities for safe public use, the preservation of the aesthetic quality of the area, and the beneficent management of fish and wildlife constitute the objectives for resource management.

Project Location

1.03 Lake Ashtabula was created by the construction of Baldhill Dam and is located on the Sheyenne River in the eastern central portion of North Dakota (Plate 1). The Sheyenne River originates in central North Dakota and flows approximately 500 miles southeasterly and joins the Red River of the North about 10 miles north of Fargo, North Dakota. Baldhill Dam is 271 river miles above the confluence of the Sheyenne River with the Red River of the North and approximately 16 river miles upstream from Valley City, North Dakota (the Barnes County Seat). By highway, the dam is about 75 miles west of Fargo, North Dakota.

1.04 Lake Ashtabula, behind Baldhill Dam, has a total capacity of 70,700 acre-feet at the normal full pool elevation of 1,266 feet. The reservoir is approximately 27 miles (41.8 river miles) long and up to 0.6 mile wide, has a fairly even shoreline of about 78 miles and a surface area of 5,430 acres. All the developed public use areas and the bulk of the lake's surface water are in Barnes County. The upper portions of Lake Ashtabula and related Federal lands are located in portions of Griggs and Steele Counties.

#### PROPOSED ACTION

##### Statement of Proposed Action

1.05 The St. Paul District, Corps of Engineers, proposes to allow seaplanes to use the Lake Ashtabula reservoir. This action is consistent with the operational, recreational, and environmental objectives established for the reservoir. The proposed landing area for seaplanes on Lake Ashtabula would extend from 1,500 feet above the Main Public Use Area to below Sundstrom's Landing recreation area (see Plate 2). Since seaplane landing on Lake Ashtabula has been and is expected to be very infrequent, a designated landing area is deemed sufficient. No seaplane base or fuel-storage area is being proposed. No oil or other chemicals are stored on reservoir property and no such storage is projected; therefore, the reservoir operations managers do not have and do not deem necessary in the future to have a spill contingency plan. The reservoir managers do have an emergency safety plan.

##### Design Considerations

1.06 The following are the design considerations used for selection of the landing area:

a. Minimum standards include:

- (1) Take-off and landing strip must be a minimum of 2,500 feet long and 300 feet wide.
- (2) The water depth must not be less than 3 feet for all portions of the landing strip.

b. Other factors include:

- (1) Planes land into the wind and take off into the wind; therefore, the linear dimension of the landing strip should be aligned to take advantage of prevailing winds.
- (2) Safety considerations do not allow a landing strip within 1,500 feet of the dam.
- (3) The presence of wildlife management areas and/or spawning areas must be considered.

##### Zoning Restrictions

1.07 For Lake Ashtabula, the following zoning restrictions are proposed:

a. General Information

- (1) Recreational seaplane operations are allowed 7 days a week from sunrise to sunset.

# The Project Location

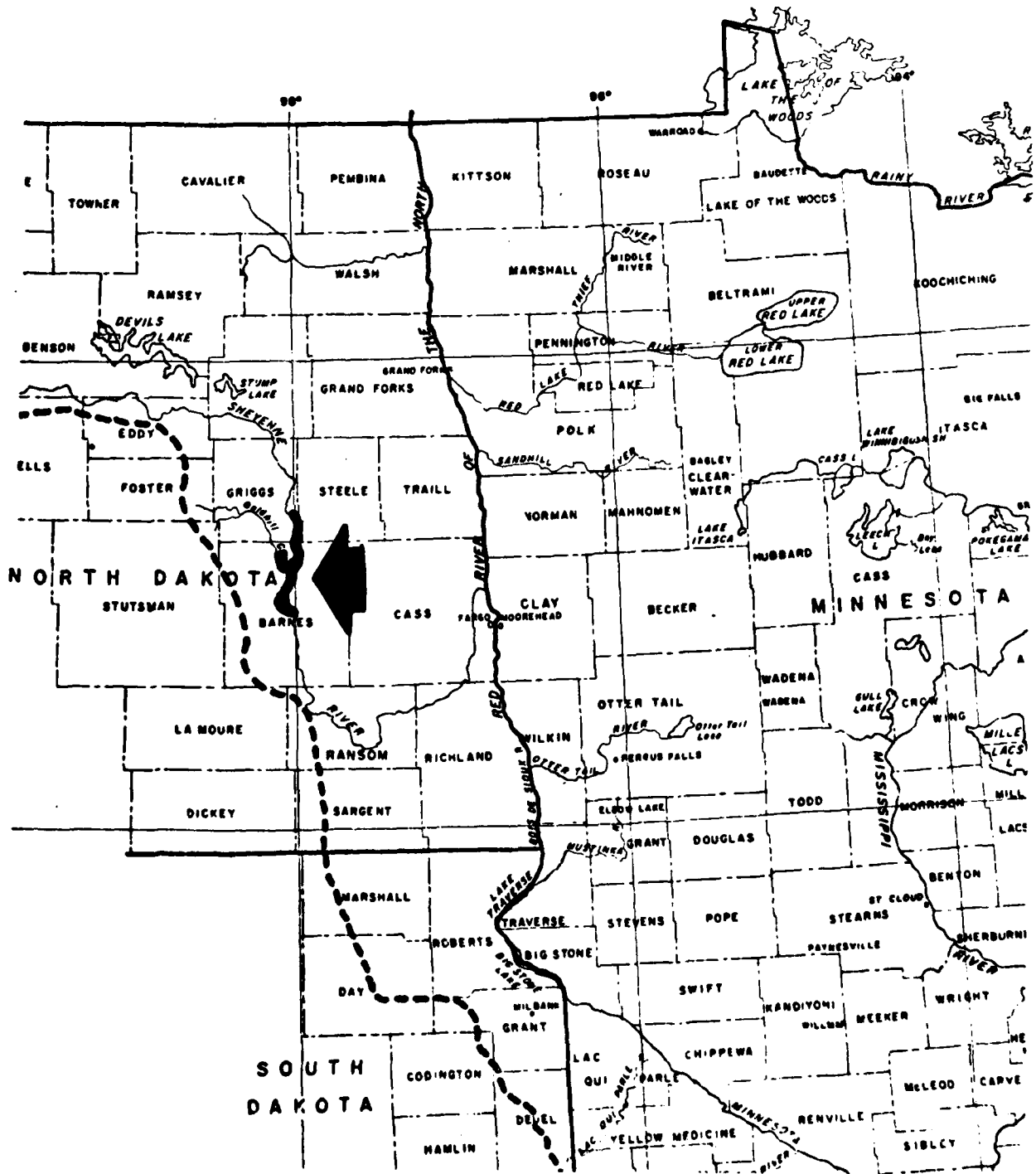


PLATE I






# Lake Ashtabula

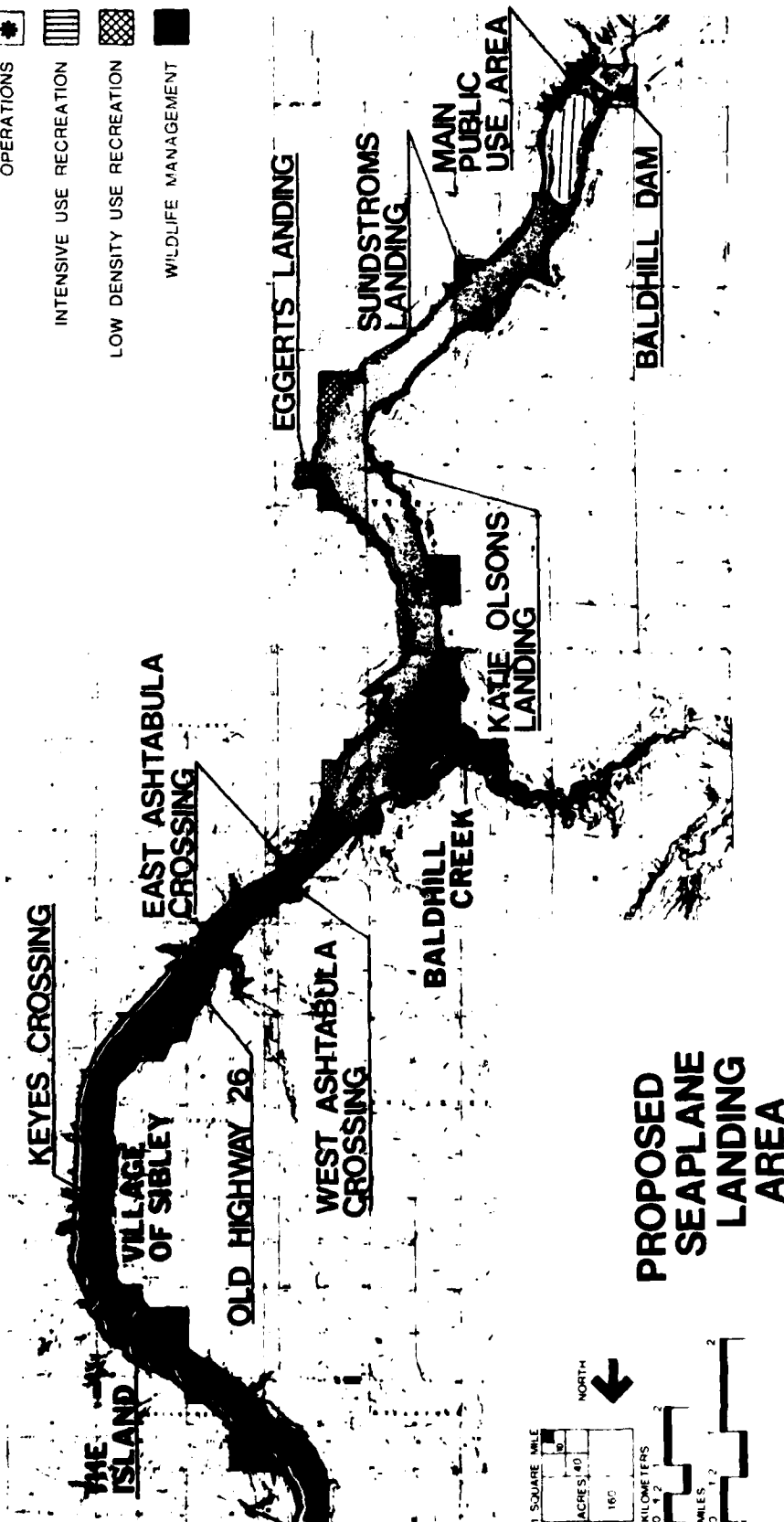
## GENERAL INFORMATION:

1. RECREATIONAL SEAPLANE OPERATIONS ARE ALLOWED SEVEN DAYS A WEEK FROM SUNRISE TO SUNSET.
2. AIRCRAFT LARGER THAN 5000 POUNDS GROSS WEIGHT ARE PROHIBITED FROM LANDING.
3. ONCE DOWN ON THE WATER A SEAPLANE IS CONSIDERED A BOAT. (SUBJECT TO APPLICABLE REGULATIONS).
4. THE AREAS DESIGNATED ON THIS MAP ARE GENERAL IN NATURE AND ARE NOT INTENDED TO OUTLINE HAZARDS THAT MAY EXIST FOR SEAPLANE OPERATIONS. THE OPERATION OF A SEAPLANE AT CORPS PROJECTS IS AT THE RISK OF THE PLANES ON-EP, OPERATOR, AND PASSENGER (S).

## PROHIBITED AREAS:

1. SEAPLANES MAY NOT LAND OR TAKEOFF WITHIN 500 FEET OF THE SHORELINE AT ANY LOCATION.
2. SEAPLANES MAY NOT LAND OR TAKEOFF WITHIN 1500 FEET OF A CORP DAM STRUCTURE.

-  PROPOSED SEAPLANE LANDING AREA
-  OPERATIONS
-  INTENSIVE USE RECREATION
-  LOW DENSITY USE RECREATION
-  WILDLIFE MANAGEMENT





(2) Aircraft larger than 5,000 pounds gross weight are prohibited from landing.

(3) Once down on the water, a seaplane is considered a boat. (Subject to applicable regulations.)

(4) The areas designated on Plate 2 are general in nature and are not intended to outline hazards that may exist for seaplane operations. The operation of a seaplane at Corps projects is at the risk of the plane's owner, operator, and passenger(s).

b. Prohibited Areas

(1) Seaplanes may not land or take off within 500 feet of the shoreline at any location.

(2) Seaplanes may not land or take off within 1,500 feet of a Corps dam structure.

BACKGROUND

Project History

1.08 Construction of Baldhill Dam began in July 1947. In the spring of 1950, the dam, although not entirely completed, was placed in emergency operation because of severe flooding conditions. Baldhill Dam was substantially completed in June 1950 and formally dedicated on 21 September 1952.

Project Lands

1.09 Lake Ashtabula is located entirely on federally-owned lands. However, the band of federally-owned land around the lake is extremely narrow, and in certain areas is reduced to only a few feet. At points along the lakeshore, this Federal ownership expands so that there is room for recreational facilities. It is within these larger tracts that the existing recreational development has taken place. The overall land ownership is shown in Plate 2.

1.10 Much of the federally-owned land acquired for the project is leased for the purposes of wildlife management. The lands immediately below the dam are used by the U.S. Fish and Wildlife Service for fish hatchery ponds. The Federal lands along Baldhill Creek, as well as the marsh areas above the lake, are leased to the North Dakota State Game and Fish Department as refuge and wildlife management areas.

1.11 Most recently, in response to established directives, an interim Lakeshore Management Plan addressed the problems of private encroachments, alterations of shoreline, and removal of natural vegetation. This plan designates areas of the lakeshore which are to remain natural and untouched and those areas where limited development is permitted under a permit and/or license program. This management plan was developed through a combined effort of Federal, State, and local government agencies and local special interest groups.

## Recreational Areas

1.12 In recent years, the importance of providing recreational opportunities has increased. Lake Ashtabula is located in an area where there are few natural water bodies; consequently, this large expanse of water draws large numbers of visitors each year.

1.13 There are presently eight developed recreational areas at Lake Ashtabula: (1) Main Public Use, (2) Sundstrom's Landing, (3) Eggert's Landing, (4) Katie Olson's Landing, (5) East Ashtabula Crossing, (6) West Ashtabula Crossing, (7) Old Highway 26, and (8) Keyes Crossing (Plate 2). The Baldhill Dam site functions as an informal interpretive and general sightseeing area.

## Recreational Use

1.14 Visitation of the Lake Ashtabula project has shown an overall increase since the late 1960's when yearly visitation figures were first developed. Recreation days of use in 1975 were 481,000; in 1978, they were 505,400 (see Table 1 for data on the public use areas). The lake is also well used in the winter months, providing excellent fishing and snowmobiling opportunities. During the winter, approximately 2,000 (and sometimes more) people per month use Lake Ashtabula for winter recreation.

TABLE 1

### RECREATIONAL USE IN 1978

#### A. RECREATIONAL DAYS OF USE BY AREA

<u>Recreational Area</u>	<u>Recreation Days of Use</u> (traffic count)
Total for Lake Ashtabula (includes estimate of other use from monthly surveys)	505,400
Main Public Use	128,100
Sundstrom's Landing	20,800
Old Highway 26	11,800
Keyes Crossing	35,700
Eggert's Landing	34,600
Katie Olson's Landing	17,400
Ashtabula Crossing	126,000

#### B. WATER USE OF LAKE ASHTABULA \*

Fishing	55 percent
Boating	40 percent
Swimming	20 percent
Water Skiing	10 percent

\*Percent includes double use up to 250 percent for all recreational activities.

1.15 Picnicking, fishing, camping, swimming, and boating are the main summer activities at Lake Ashtabula. Other recreational activities include water skiing, sailing, waterfowl hunting, hiking, snowmobiling, crosscountry skiing, ice skating, and ice fishing.

1.16 In the past 9 years, only two seaplanes are known to have landed on Lake Ashtabula. They landed to refuel. Fuel has to be trucked from Valley City.

## 2.00 ENVIRONMENTAL SETTING

### NATURAL ENVIRONMENT

#### Climate

2.01 The average annual precipitation over the Lake Ashtabula basin is less than 19 inches. June, July, and August are the months with the highest average precipitation. Winter precipitation is light, with heavy snowfalls being the exception rather than the rule. This region receives about 32 inches of snowfall annually. The combination of the spring snowmelt and the additional runoff from the spring rains has caused the majority of the damaging floods on the Sheyenne River.

2.02 The summers at Lake Ashtabula are generally comfortable, averaging in the low 70's, with very few days of hot and humid weather. Nights, with a few exceptions, are comfortably cool, in the upper 50's. The winter months are cold and dry with maximum temperatures rising above freezing only on an average of 6 days each month, and with nighttime lows dropping below zero approximately half of the time.

#### Topography and Soils

2.03 The Sheyenne River Valley is deeply cut into relatively flat regional topography, the typical slope of which is about 15 feet per mile. Because of this flatness, the lake is difficult to perceive from as near as a half-mile to the east or west. The slopes immediately surrounding the lake are moderate to steep, with frequent and deep branching ravines. Because of the steepness, agricultural use in the area is typically limited to grazing, with some scattered areas under cultivation. There are also spotted developments of homes and summer cottages on the flatter terrain along with the recreational areas. The actual project lands are not intended to be used for either grazing or farming, but rather to act as natural buffers between the lake and the non-project lands. However, some unauthorized grazing on project lands occurs because of a lack of fencing, and some crop spraying on adjacent private lands drifts onto project lands, adversely affecting vegetation.

2.04 Since the terrain surrounding Lake Ashtabula is flat and open, wind is a major factor in the climate of the project area. Wind speeds average 15 miles per hour, and speeds of 30 to 40 miles per hour are common. Prevailing winds are from the northwest. Prairie squalls

across the lake are fairly frequent and may reach a strength of up to 70 miles per hour.

### Ecology

2.05 The land in the river basin is essentially agricultural, with most of the flat or gently sloping land under cultivation, while the steeper slopes are used for grazing. Project lands evolve from grasslands to shrub brush communities dominated by wolfberry to native prairie. Wooded areas can be found along the shoreline at scattered locations and in most of the ravines feeding into the reservoir. The dominant tree species are: bur oak, American elm, cottonwood, Russian olive, and box elder. Wetland vegetation such as cattails and bulrushes are occasionally found in small stands along the main body of the lake but are the dominant plant communities at the Baldhill Creek area, other bays, and the upper reaches of the lake north of Sibley. Pondweed (Potamogeton spp.) is prevalent along the shoreline (Institute for Ecological Studies, 1974).

2.06 Lake Ashtabula has improved fishing conditions several times over that of the pre-impoundment condition of the Sheyenne River (Institute for Ecological Studies, 1974). Recreational fishing is very popular, with yellow perch, walleye, white bass, northern pike, and black bullheads being the most commonly caught species. The lake is a good producer of fish because of its high fertility, although there is some concern for the supply of spawning habitat for walleye and northern pike. Sedimentation is responsible for a decrease in spawning grounds and could create a problem for fish production in the future which, in turn, would decrease the popularity of fishing at Lake Ashtabula. Fishing from boats is common from Keyes Crossing to the dam.

2.07 Compared to pre-reservoir conditions, there has been a general decrease in wildlife habitat for feeding and rearing and, subsequently, in species populations. Game birds such as pheasant, partridge and grouse have diminished because of loss of habitat, which consisted primarily of the wooded shoreline along the Sheyenne River. Muskrats, mink, beaver, and raccoon are still found at Lake Ashtabula although substantially reduced from preimpoundment populations. White-tailed deer populations have also decreased due to the flooding of woodlands that existed along the river.

2.08 Waterfowl habitat for feeding and rearing is not good at the reservoir because the fluctuating water level makes it difficult for wetland plants to become established. During the spring and fall, however, Lake Ashtabula is a major resting area for many species of waterfowl, including ducks, geese, and whistling swans. White pelicans and double crested cormorants are also common throughout the spring and summer months.

2.09 There are two major rest areas used by migrating ducks and geese. These are at the mouth of Baldhill Creek and north of Sibley from the island to the railroad crossing. The proposed seaplane landing area receives some use by migrating waterfowl.

2.10 The changes that have occurred along the reservoir are expected to remain constant. While the North Dakota Game and Fish Department has

establish a number of game management areas along the lake, upland game is still not common along the lake (Institute for Ecological Studies, 1974).

#### Water Quality

2.11 Lake Ashtabula is a nutrient-rich water body which produces frequent algal blooms and large fish populations. The lake is highly eutrophic and is aging faster than normal. There have been a number of studies on the water quality of the lake. All agree that the lake is eutrophic but differ as to the source.

2.12 The Sheyenne River carries sediment and nutrients into the lake. The nutrients entering the lake come from many sources upstream in the drainage basin of the lake. The entire area around the lake and upstream is heavily farmed or ranched. Runoff from the highly fertilized fields and feedlots eventually finds its way into the lake. Since the lake has a controlled outlet, the nutrients settle out, accelerating the aging process. The lake is also very turbid.

2.13 Due to the large number of algal blooms, swimming and other water-oriented activities have declined in popularity. The lake remains very productive for fishing, however.

2.14 The North Dakota Game and Fish Department has indicated a concern about the quality of fishing due to deterioration of water quality. Populations of yellow perch, suckers, and bullheads are increasing. Rising nutrient levels, decreasing dissolved oxygen levels, and increasing aquatic vegetation all contribute to a decrease in high quality game fish such as northern pike and walleye. Current residents and users indicate that fishing success for walleye and northern pike is declining. The Game and Fish Department feels that their annual stocking program is not increasing the fish population since most of the fingerlings are being preyed upon by the overabundance of perch. Northern pike and walleye will continue to decline if water quality continues to decline and spawning areas are destroyed.

2.15 The increased aquatic plant life has begun to affect boating, and the frequent algal blooms in July and August have affected swimming. Young adults and teenagers in the Valley City area have indicated that they are using Lake Ashtabula less for swimming due to the water quality.

2.16 If the lake's water quality continues to deteriorate, there will be less need to redevelop the existing recreation sites. Since Lake Ashtabula is a water-oriented recreation project, existing usage could decline as water quality declines.

#### SOCIOECONOMIC ENVIRONMENT

##### Social Factors

2.17 North Dakota experienced its greatest population in 1930. With the drought and depression years that followed, the population dropped rapidly as people sought employment elsewhere. At that same time, people began

moving from rural areas into urban centers. That trend is continuing and is reflected in the population figures for Barnes, Griggs, and Steele Counties.

2.18 Farming and ranching are the major occupations in this area. Technological advances and economic factors have affected both. Farms and ranches are getting larger, but are operated by fewer people.

2.19 While there are now fewer people in the three-county area, these people have higher incomes and more leisure time. These two factors, combined with a larger selection of recreational products, have a direct influence on use of recreational facilities. Recreational activities will increase and will become more diverse as the general public becomes better able to afford specific equipment or facilities.

#### Related Recreation Areas

2.20 Within 40 miles of Lake Ashtabula, there are two other major water-oriented recreational facilities: the Pipestem Reservoir (U.S. Army Corps of Engineers) and the Jamestown Reservoir (Bureau of Reclamation), (see Table 2, paragraph 4.04). Recreational activities at these two reservoirs are similar to the use of Lake Ashtabula. In addition, seaplane landings on these reservoirs are allowed.

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TABLE 2

#### LAKES NEAR TO LAKE ASHTABULA

<u>Lake</u>	<u>Size (acres)</u>	<u>Distance (miles)</u>
Jamestown Reservoir	2,560	40
Pipestem Reservoir (at Jamestown)	900	40

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2.21 Non-water-oriented, recreation areas within this zone attract users and compete with Lake Ashtabula in certain activities. To the south, Barnes County operates two parks: Clausen Springs, which provides similar facilities as Lake Ashtabula, and Little Yellowstone, which provides camping and picnicking. Together, these two facilities provide the most competition for visitor use within a 50-mile radius.

#### Private Recreational Use of Lake Ashtabula

2.22 There are three small resorts on Lake Ashtabula; they are located at Eggert's Landing, the village of Sibley, and East Ashtabula Crossing. There are cabins at Eggert's Landing, and a motel is being constructed at Sibley. In addition, there are 13 groups of private cabins on the shores of Lake Ashtabula.

### 3.00 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

#### GENERAL

3.01 This section discusses the probable environmental impacts associated with the proposed designation of a seaplane landing area on Lake Ashtabula. The parameters listed in Exhibit 1 have been reviewed and considered as part of this assessment. Salient impacts identified are discussed in the following paragraphs.

#### SOCIAL EFFECTS

##### Noise Levels

3.02 Operation of a seaplane at the reservoir would generate additional noise greater than any vehicle or boat now being used. This noise would disturb wildlife, especially waterfowl, and residents and visitors at the lake.

##### Historical and Archaeological Values

3.03 No impacts on historical or archaeological resources are anticipated. If impacts become known, the required coordination with other agencies will be conducted.

##### Recreational Opportunities

3.04 Taxiing seaplanes on the lake could interfere with boating use in the vicinity, especially near the public use area.

##### Transportation

3.05 The additional available landing area provided by Lake Ashtabula would benefit seaplane operators.

##### Public Health and Safety

3.06 Additional seaplane landing (non-emergency) on Lake Ashtabula would increase the potential for accidents. A seaplane failure over or on the reservoir, or a collision with a boat could cause serious injuries or fatalities.

##### Controversy

3.07 Boaters who use the lake for fishing, water skiing, sailing, and other activities may object if other than emergency seaplane landing is allowed. Visitors or owners of cabins may also object because of increased potential for accidents and additional noise.

3.08 Some may argue that designating a seaplane landing area on Lake Ashtabula cannot be justified because there is no apparent recreation need for seaplanes, the planes may adversely impact recreationists on

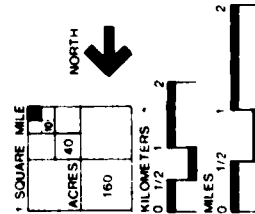
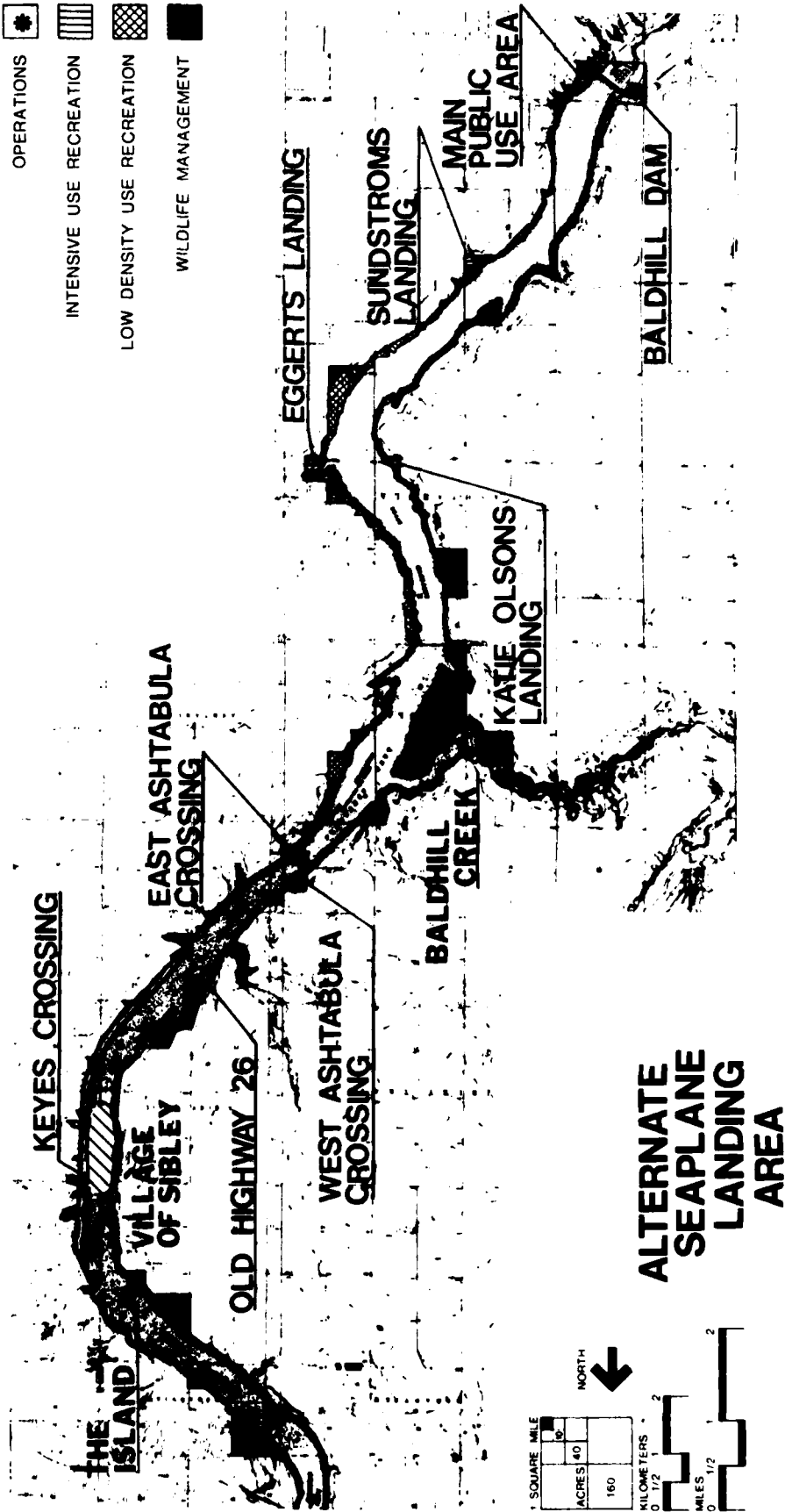
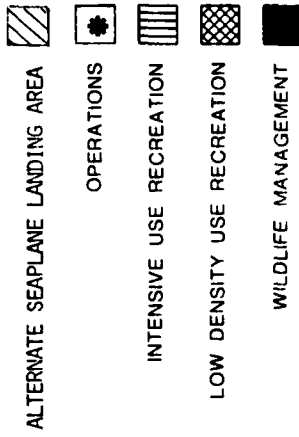
# Lake Ashtabula

## GENERAL INFORMATION:

1. RECREATIONAL SEAPLANE OPERATIONS ARE ALLOWED SEVEN DAYS A WEEK FROM SUNRISE TO SUNSET.
2. AIRCRAFT LARGER THAN 5000 POUNDS GROSS WEIGHT ARE PROHIBITED FROM LANDING.
3. ONCE DOWN ON THE WATER A SEAPLANE IS CONSIDERED A BOAT. (SUBJECT TO APPLICABLE REGULATIONS).
4. THE AREAS DESIGNATED ON THIS MAP ARE GENERAL IN NATURE AND ARE NOT INTENDED TO OUTLINE HAZARDS THAT MAY EXIST FOR SEAPLANE OPERATIONS. THE OPERATION OF A SEAPLANE AT CLOSE PROXIMITY IS AT THE RISK OF THE PLANE'S OWNER, OPERATOR, AND PASSENGER (S).

## PROHIBITED AREAS:

1. SEAPLANES MAY NOT LAND OR TAKEOFF WITHIN 500 FEET OF THE SHORELINE AT ANY LOCATION.
2. SEAPLANES MAY NOT LAND OR TAKEOFF WITHIN 1500 FEET OF A CORP DAM STRUCTURE.





the lake, seaplanes are allowed to land in two reservoirs only 40 miles away, and emergency landings would be allowed on Lake Ashtabula in any case. On the other hand, others may argue that any adverse impacts would probably be so infrequent that denial of a designated landing area cannot be justified.

#### NATURAL RESOURCE EFFECTS

##### Aquatic Habitat

3.09 Landing by a seaplane would be disturbing to waterfowl, and the noise might disturb other wildlife. The major impact would be scattering of waterfowl during the spring and fall migratory seasons.

##### Surface Water Quality

3.10 Taxiing of a seaplane in shallow areas would hardly disturb sediments, as the source of a seaplane's propulsion is out of the water. As with motorboats, there is a possibility of contamination of the lake from exhaust and spills during refueling. The wake associated with the average seaplane is quite small.

#### 4.00 ALTERNATIVES TO THE PROPOSED ACTION

##### ALTERNATIVES AT LAKE ASHTABULA

##### No Action

4.01 The no action alternative would be not to implement any of the proposed changes. Under this alternative, the impacts discussed in Section 3.00 would not occur.

##### Alternative Landing Areas

4.02 Another possible landing area which would minimize potential conflicts with recreational and wildlife management purposes would be below Keyes Crossing as shown on Plate 3. However, for the infrequent seaplane use projected, one landing area should suffice. The preferred location is closer to reservoir headquarters where better control over potential emergency situations can be exercised; also, the preferred site is closer to fuel sources in Valley City.

##### Marked Runway

4.03 A marked runway could be designated; however, this is not required. The infrequent seaplane use expected does not justify the interference that buoys would cause to boaters.

##### ALTERNATIVE LANDING AREAS AT OTHER LOCATIONS

4.04 Presently, seaplanes are allowed to land on the Jamestown and Pipestem Reservoirs at Jamestown, North Dakota, about 40 miles west of Lake Ashtabula.

5.00 COORDINATION

5.01 The Federal Aviation Administration, U.S. Department of Transportation, was contacted for guidance.

5.02 The North Dakota District Office of the Federal Aviation Administration will receive a copy of the public notice on the proposed action. The Federal Aviation Administration in Washington will be notified of the District Engineer's decision on the proposed action. If a landing area is designated, maps will be available to the public.

6.00 CONCLUSION

6.01 I conclude that the proposed seaplane project at Lake Ashtabula is not a major Federal action significantly affecting the quality of the human environment. In consequence I have determined that an environmental impact statement is not required by the provisions of Section 102 of the National Environmental Policy Act (P.L. 91-190) and applicable Corps of Engineers regulations and guidance.

27 July 1979  
DATE



WILLIAM W. BADGER  
Colonel, Corps of Engineers  
District Engineer

# ENVIRONMENTAL IMPACT ASSESSMENT MATRIX

## MAGNITUDE OF PROBABLE IMPACT

NAME OF PARAMETER	INCREASING BENEFICIAL IMPACT ←			NO APPRECIABLE EFFECT			INCREASING ADVERSE IMPACT →		
	SIGNIFICANT	SUBSTANTIAL	MINOR				MINOR	SUBSTANTIAL	SIGNIFICANT
A. SOCIAL EFFECTS									
1. Historical/Archaeological Values						X			
2. Noise Levels							X		
3. Aesthetic Values						X			
4. Recreational Opportunities							X		
5. Transportation			X						
6. Public Health & Safety							X		
7. Community Cohesion (Sense of Unity)						X			
8. Community Growth & Development						X			
9. Business and Home Relocations						X			
10. Existing/Potential Land Use						X			
11. Controversy						Possible			
B. ECONOMIC EFFECTS									
1. Property Values						X			
2. Tax Revenues						X			
3. Public Facilities and Services						X			
4. Regional Growth						X			
5. Employment						X			
6. Business Activity						X			
7. Farmland/Food Supply						X			
8. Commercial Navigation						X			
9. Flooding Effects						X			
10. Energy Needs and Resources						X			
C. NATURAL RESOURCE EFFECTS									
1. Air Quality						X			
2. Terrestrial Habitat						X			
3. Wetlands						X			
4. Aquatic Habitat							X		
5. Habitat Diversity and Interspersion						X			
6. Biological Productivity						X			
7. Surface Water Quality							X		
8. Water Supply						X			
9. Groundwater						X			
10. Soils						X			
11. Threatened or Endangered Species						X			